

Preparation: Arrive <u>at least</u> a half hour early. Have your space set-up at least fifteen minutes before participants arrive. Greet participants as they arrive to establish rapport. Materials Needed: Parking lot, pencil boxes, pencils, sticky notes, highlighters, markers, chart paper, tape, music of your choice, speakers, projector, screen

Say: Welcome to the Professional Development Module for elementary RTI: Reading. I'm glad you're here!

## Introduction

Introduce yourself briefly, and establish a connection with the audience. Begin by highlighting your background in education. Tell about a brief personal experience that assures participants of your knowledge base, and also lets them know that you understand their situation.

Say: This training identifies evidence-based practices that will validate what you are already doing in your teaching practice and will hopefully motivate you to want to try some new practices.

## **Orientation to Materials**

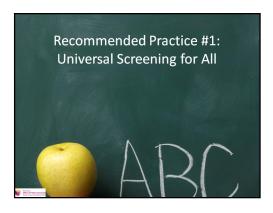
Quickly walk participants through the materials for the module, pointing out the sections below. As you point out each section, have participants tab each section with a sticky note.

- •Professional Development Lesson Overview and Visual Diagram: Explain that the diagram is simply the overview diagram for the module—we will discuss this diagram in more depth in a moment. Explain that the lesson plan is very important for their own implementation of the module, as it provides an overview for each slide and activity, coupled with the recommended time for each slide and activity. This lesson planning chart is extremely helpful not only in their own preparation, but also if they have to spread out the module over several smaller sessions, as it can help determine what can be covered for each session.
- •Presenter Notes: Explain that the presenter notes are the slides that contain all of the notes for the presenter. Note that participant notes or any media, such as a movie, is needed they will see an icon on the slide as an indicator.
- •Participant Notes: Explain that the participant notes are simply the slides in a handout format so that participants can take notes during the presentation.
- •Handouts: Explain that the handouts are additional resources that will be referenced often. The handouts have been created by Doing What Works website and the Montana Office of Public Instruction.

Explain that as you work today, you will be using a signal to let participants know when discussion time is ending and that you need their attention up front.

Model/practice the signal you will use to bring the group back together after small group discussions and activities (ex., count down, hand raise, cue word, etc.)





Say: We are going to explore the first key concept, Universal Screening for All.

Media: None Handout: None





Say: This visual diagram illustrates the recommended practices found in an effective Rtl framework. The recommended practices include universal screening, progress monitoring and differentiation, and systematic skill instruction.

You have a larger copy of this slide in your handouts for easier viewing.

Take one minute to scan this diagram.

Now turn to a shoulder partner and discuss the components of the diagram. Be prepared to share something from the diagram with the group.

Call on two or three individuals to share something they observed about the diagram.



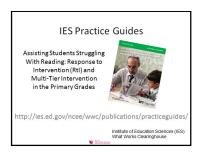
## **Recommended Practices**

- 1. Universal Screenings
- 2. Progress Monitoring and Differentiation Based on Data
- 3. Systematic Instruction

**W** 200

Say: In this module we will explore the research evidence for successful Rtl reading implementation in the primary grades through three recommended practices: Universal Screening, Progress Monitoring and Differentiating, and Systemic Skill Instruction. This module will explore each of these practices through various multimedia and activities.





Say: This Practice Guide is the foundation for the Doing What Works content on Response to Intervention in reading. The practice guide is available on the US Department of Education's Institute of Education Sciences What Works Clearinghouse website if you would like more information.

The Practice Guide was developed by an expert panel convened by the Institute of Education Sciences.

Assisting Students Struggling With Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades: Includes five recommendations designed to help educators use Response to Intervention (RtI) practices to identify students who need assistance in reading and to implement focused interventions to promote their reading achievement. A summary of the research evidence and a level of evidence rating are provided for each recommendation. For the Doing What Works website, these five recommendations have been merged into four practices.

http://ies.ed.gov/ncee/wwc/publications/practiceguides/





Say: Each practice is organized on the Doing What Works website into these four categories.

## **Practice Summary**

This section offers an overview of the practice & examines the issues it addresses. These slides are indicated with the orange globe icon.

## Learn What Works

This section offers a better understand about the research base behind the practice. These slides are indicated with the green circle icon.

## See How It Works

This section offers examples of schools engaged in these practices. These slides are indicated with the blue cog icon.

## Do What Works

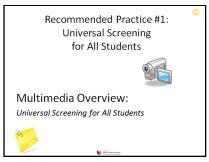
This section offers action ideas and examples of tools to improve your own practice. This section pulls all of the ideas together from the previous three sections. These slides are indicated with an icon that displays an orange circle with an arrow in it.





Say: This section offers an overview of the practice & examines the issues it addresses. These slides are indicated with the orange globe icon.





Say: This multimedia overview explains the value of universal screening, describes the recommended components of an effective screening system, and provides information on establishing benchmarks and using cut-points to identify at-risk students.

Find the "Multimedia Overview; Universal Screening for All Students" handout. While you watch this multimedia overview listen carefully and fill in the blanks within the handout.

Media: Multimedia Overview: Universal Screening for All Students (6:19) Handout #2 Multimedia Overview: Universal Screening for All Students



## **Group Activity**

- In groups of 3-5
- Identify a spokesperson for the group
- Discuss at least <u>three</u> different pieces of information from the video.
- Talk about how the information in the video compares to your current practice
- · Assist each other in filling in the blanks



Say: Identify who will be the spokesperson for the group for this activity. This should be a different person than the person who was spokesperson during the last group activity.

Discuss three different pieces of information from the video. How did the information in the video compare to your current practice? You can also assist each other fill in any of the blanks that you may have missed during the video.

No Media

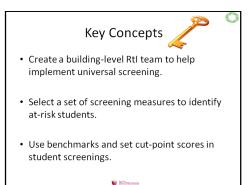
Handout #2: Multi-media Overview: Universal Screening for All Students





Say: This section offers a better understanding about the research base behind the practice. These slides are indicated with the green circle icon.





## **Key Concepts**

1. Create a building-level Rtl team to help implement universal screening.

Universal screening requires school-wide coordination of staff and resources. A building-level Rtl team can address logistical issues (e.g., scheduling and assigning staff to administer assessments), select screening measures to identify at-risk students, and establish progress monitoring procedures. The team may include teachers, administrators, reading specialists, school psychologists, ELL specialists, and special education staff.

2. Select a set of screening measures to identify at-risk students.

Screening instruments need to be efficient, reliable, and valid measures of appropriate grade-level reading skills, such as phonemic awareness, letter knowledge, vocabulary, decoding, word identification, and text reading. Using at least two screening measures can enhance the accuracy of the process. Schools should consider a screening measure's ability to correctly identify students at risk for reading difficulties (sensitivity) and students at low risk for such difficulties (specificity).

3. Use benchmarks and set cut-point scores in student screenings.

Schools can use benchmarks and set cut-point scores to identify children at low, moderate, or high risk for developing reading difficulties. Each district or school can develop its own benchmarks and cut-point scores for screening students; however, it may be more feasible to use guidelines from national sources or instrument developers, especially during the early phases of implementation. Setting cut-point scores allows schools to identify an initial pool of at-risk students, but no one assessment measure is perfectly reliable. Therefore, schools should engage regular progress monitoring to track student achievement.





Say: In this interview, Dr. Donald Compton explains the purpose of universal screening, describes how it fits into a multi-tiered intervention system, and discusses using screening to identify students at risk for reading problems and place them into appropriate interventions.

As you listen fill in the blanks within the "Screening All Students Concept Map" and be prepared to discuss the information with a partner.

Media: Expert Interview: Screening All Students (5:54)

Handout: Screening All Students Concept Map



## Partner Activity Review what you wrote on your Screening All Students Concept Map with your shoulder partner.

Say: Review what you wrote on your Screening All Students Concept Map with your shoulder partner.



## Building Level Rtl Team Addresses logistical issues: - Scheduling - Assigning staff to administer assessments - Allocating resources - Selecting screening materials - Establish progress monitoring procedures

Say: One of the first steps toward universal screening is establishing a building level RTI Team. These team members address logistical issues such as:

- Scheduling
- Assigning staff to administer assessments
- Allocating resources
- Selecting screening materials
- Establish progress monitoring procedures



## Selecting a Screening Measure

- Instruments need to be
  - efficient
- reliable
- valid
- Measure appropriate grade-level reading skills
  - such as phonemic awareness, letter knowledge, vocabulary, decoding, word identification, and text reading

-

Say: When selecting a screening measure it is important to find measures that are efficient, reliable, and valid. These instruments must also measure appropriate grade-level reading skills.

When the building level RTI team identifies the measures they will be using they need to keep all of this in mind.



## Selecting a Screening Measure

- Using at least two screening measures can enhance the accuracy of the process
- Consider a screening measure's ability to
- correctly identify students at risk for reading difficulties(sensitivity)
- students at low risk for such difficulties (specificity)

Montana Office of Public Instructi Inter Jones, line Specimen

Say: Using at least two screening measures can enhance the accuracy of the process. Consider a screening measure's ability to correctly identify students at risk for reading difficulties or sensitivity and whether it indicates students at low risk for such difficulties or specificity.



## Benchmarks and Cut-point Scores

- Benchmarks and set cut-point scores help identify children at low, moderate, or high risk for developing reading difficulties
- District or schools can develop its own benchmarks and cut-point scores for screening students
- National sources and instruments important during the early phases of implementation

W Statement

Say: Benchmarks and set cut-point scores help identify children at low, moderate, or high risk for developing reading difficulties.

District or schools can develop its own benchmarks and cut-point scores for screening students, however national sources and instruments important during the early phases of implementation to ensure that cut-points are not set too low or too high for your population of students.



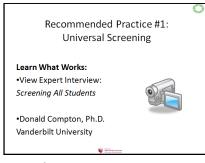
## Benchmarks and Cut-point Scores

- Setting cut-point scores allows schools to identify an initial pool of at-risk students
- No one assessment measure is perfectly reliable
- Schools should engage regular progress monitoring to track student achievement



Say: Cut-point scores allows schools to identify an initial pool of at-risk students, however no one assessment measure is perfectly reliable so schools should engage regular progress monitoring to track student achievement. Teacher observation and other measures should be taken into account as well.





Preparation: Write the three big ideas on chart paper:

- 1. Components of the System
- 2. Setting up a Screening System
- 3. Cut Scores

Materials: sticky notes, chart paper

Say: Dr. Compton outlines the components of a school-wide screening system and gives an example of how a school might implement a universal screening program. He provides details about how schools can select appropriate benchmarks and set cut-points tailored to their student populations.

Direct participants to write the following big ideas on three sticky notes (one for each idea): (Write these three ideas on chart paper)

- 1. Components of the System
- 2. Setting up a Screening System
- 3. Cut Scores

Explain to participants that as they watch the video, they should write key information on the sticky note that they would like to remember for that topic. Once the video is over, they will use the information they've written to complete an activity.

Media: Expert Interview: Implementing a Screening Program (5:59)

Handout: None

<sup>\*\*</sup>Leave space under each so that you can add key ideas during the check-in time.



## 60, 30, 15 Partner Activity

Choose one of the topics from your sticky notes and discuss the topic with your shoulder partner.

- Partner 1 Speaks for 60 seconds
- Partner 2 speaks for 30 seconds
- Partner 1 sums it up in 15



Preparation: Write the three big ideas on chart paper:

- 1. Components of the System
- 2. Setting up a Screening System
- 3. Cut Scores

\*\*Leave space under each so that you can add key ideas during the check-in time.

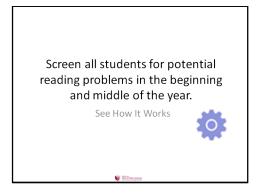
Materials: sticky notes, chart paper

Say: Choose one of the topics from your sticky notes and discuss the topic with your shoulder partner.

Partner 1 Speaks for 60 seconds Partner 2 speaks for 30 seconds Partner 1 sums it up in 15

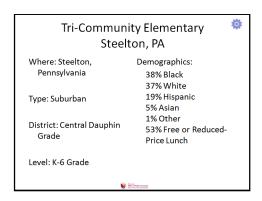
At the end of the partner time, check in with individuals and write their thoughts under the corresponding ideas on the chart paper.





Say: This section offers examples of schools engaged in these practices. These slides are indicated with the blue cog icon.





Say: The next video is with Nadine Hoover, a literacy coach, at Tri-Community Elementary in Steelton, PA. Here is some information including demographics about her school.

Walk through the information on the slide.

Demographics Based on 2008-09 School Accountability Report Card





Say: This next videos is an interview with Nadine Hoover, a literacy coach, at Tri-Community Elementary. Listen as she discusses the purpose, scheduling, and administration of universal screening. She explains how the use of screening data has changed instruction at this school.

Find the "Screening and Intervention Record Forms" handout.

These screening forms are used by Rtl data teams in Pennsylvania schools to record student performance, goals, targeted skills, instructional strategies, and decisions made regarding student placements in tiers. Review this form as you listen to the interview.

Media: Conducting Universal Screening (4:23)

Handout #4: Screening and Intervention Record Forms





Say: Find a partner.

Discuss this Screening and Intervention Record form.

Does your school have something similar in place?

How might you use it in your practice?

No Media

Handout #4: Screening and Intervention Record Forms



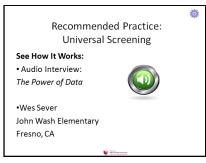


Say: The next audio interview is with principal Wes Sever from John Washington Elementary in Fresno, CA. Here is some information including demographics about his school.

Walk through the information on the slide.

Demographics Based on 2008-09 School Accountability Report Card





Say: Listen as Wes Sever, an experienced principal, talks about the significance of data for planning instruction, importance of using grade-level common assessments to enable staff collaboration, and the role of professional development in helping teachers use data and share strategies focused on improving student learning and classroom instruction.

Media: Audio Interview: The Power of Data (4:47)

Handout #5: The Power of Data



## The Power of Data Find a partner and discuss this article. How does Mr. Sever's attitude about data compare to the beliefs within your school? Was there anything that he shared that you connected with? Assist each other with filling in any blanks that you were unable to fill in.

Say: Find a partner and discuss this article.

How does Mr. Sever's attitude about data compare to the beliefs within your school?

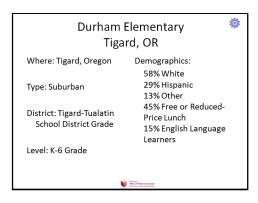
Was there anything that he shared that you connected with?

Assist each other with filling in any blanks that you were unable to fill in.

No Media

Handout #5: The Power of Data



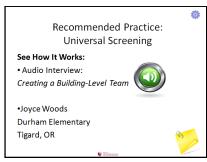


Say: The next audio interview is with Joyce Woods from Durham Elementary in Tigard, OR. Here is some information including demographics about her school.

Walk through the information on the slide.

Demographics Based on 2008-09 School Accountability Report Card





Say: In this audio interview Joyce woods, an elementary school principal, describes what is needed to create an effective Rtl leadership team. Team responsibilities at this school include data collection, data interpretation, and development of instructional plans.

View the related handout, School Leadership Team Process, as you listen to Ms. Woods.

Media: Audio Interview: Creating a Building Level Team (5:16)

Handout #6: School Leadership Team Process





Say: Building Level RTI team members may include teachers, administrators, reading specialists, school psychologists, ELL specialists, and special education staff. The key players will depend on the resources available to your school. It is important to have a variety of perspectives. Does anyone have someone not included in this list as part of their team?



## The School Leadership Team Process

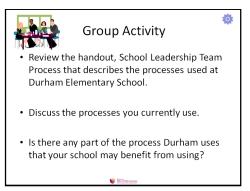
- 1. Review school-wide behavior and academic data to evaluate core program effectiveness
- 2. Screen and identify students needing additional academic and/or behavior support
- 3. Plan, implement, and modify interventions for these students, including formal referral for special education if required.



Say: Ms. Wood shared how the school leadership team processes work at Durham Elementary. She talked about these processes continually evolving and changing but this is the basic process that takes place:

- 1. Review school-wide behavior and academic data to evaluate core program effectiveness
- 2. Screen and identify students needing additional academic and/or behavior support
- 3. Plan, implement, and modify interventions for these students, including formal referral for special education if required.





Say: In groups of 3-4, review the handout "School Leadership Team Process" that describes the processes used at Durham Elementary School.

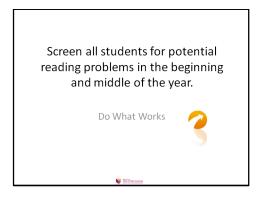
Discuss the processes you currently use.

Is there any part of the process Durham uses that your school may benefit from using?

No Media

Handout #6: School Leadership Team Process





Say: This section offers action ideas and examples of tools to improve your own practice. This section pulls all of the ideas together from the previous three sections. These slides are indicated with an icon that displays an orange circle with an arrow in it.



# Action for School Principals 1. Establish and convene a building-level team to facilitate the screening process. 2. Select a set of screening measures and use cut scores to identify at-risk students. 3. Plan an in-service staff training to learn about universal screening.

Screen all students for potential reading problems in the beginning and middle of the year.

Say: How can we do a better job of accurately identifying students at risk for reading difficulties?

This idea for action includes:

- 1. Establish and convene a building-level team to facilitate the screening process.
- 2. Select a set of screening measures and use cut scores to identify at-risk students.
- 3. Plan an in-service staff training to learn about universal screening.



## 1. Establish a Building-level Team 🕇

To will assist with....

- Coordinating staff and resources to conduct universal screening.
- Coordinating test administration and scheduling
- Selection of screening measures
- Determining cut scores to identify at-risk students

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Say: Establish and convene a building-level team to assist with coordinating the staff and resources needed to conduct universal screening.

The team can address scheduling and test administration, select screening measures, and determine cut scores to identify at-risk students.



## 1. Establish a Building-level Team

- Meet with the team and listen to the expert interview with Dr. Donald Compton.
- Reflect on the school's current level of implementation for identifying and meeting students' instructional needs.
- Provide Rtl Readiness Self-Assessment Tool for Elementary Schools handout and use the Universal Screening Indicator section to discuss what more is needed.

Say: Meet with the team and listen to the <u>expert interview with Dr. Donald Compton</u> to learn about the critical components of a universal screening system. Take note of his example describing how a school can implement an effective screening program.

Reflect on the school's current level of implementation for identifying and meeting students' instructional needs.

Provide an *Rtl Readiness Self-Assessment Tool for Elementary Schools* and use the Universal Screening Indicator section to discuss what more is needed to develop and implement a plan for screening all students.

Media: Expert Interview; Implementing a Screening Program, Donald Compton (5:59 min) Handout #7: RtI Readiness Self-Assessment Tool for Elementary Schools



## 2. Select a Set of Screening Measures

- · Schedule a planning session with the team
- Begin by viewing the multimedia overview sections on instrument selection, establishing benchmarks, and using cut scores.
- Watch the segment of the expert interview with Dr. Donald Compton in which he describes selecting benchmarks and setting cut-scores tailored to a school's student population.

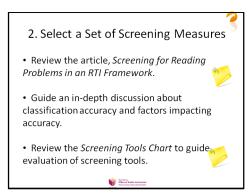
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Say "Schedule a planning session with the team to select screening measures. Begin by viewing the multimedia overview sections on instrument selection, establishing benchmarks, and using cut scores. Watch the segment of the expert interview with Dr. Donald Compton in which he describes selecting benchmarks and setting cut-scores tailored to a school's student population."

Media: Multimedia Overview; Universal Screening for All Students (6:16 min) and Expert Interview; Implementing a Screening Program Donald Compton (5:59 min)

No Handout





Say "Use the article, Screening for Reading Problems in an RTI Framework, from the RTI Action Network in the "Related Links" section of this topic to guide an in-depth discussion about classification accuracy and factors impacting accuracy.

Review the Screening Tools Chart which will <u>guide evaluation of screening tools</u> based on student reading skill focus, accuracy ratings, ability to generalize, reliability, validity, and efficiency."



# 3. Plan an In-service for Staff • Provide copies of the Rtl Reading Practice Guide prior to the meeting and ask participants to study the recommendation on screening. • Begin the session with a review of the recommendation and watch the multimedia overview. • Listen to the video interview with Dr. Donald Compton explaining how universal screening is used to place students in tiered interventions. • Provide the How to Do It, Section 1: School-Wide Screening article.

Say "Conduct an in-service session to learn about universal screening. Provide copies of the Rtl Reading Practice Guide prior to the meeting and ask participants to study the recommendation on screening.

Begin the session with a review of the recommendation and watch the <u>multimedia overview</u> describing the value of universal screening and its components. Discuss the importance of accurate identification of atrisk students and early intervention.

Listen to the <u>video interview with Dr. Donald Compton</u> explaining how universal screening is used to place students in tiered interventions. Download the How to Do It, Section 1: School-Wide Screening article from the National Research Center on Learning Disabilities' Responsiveness to Intervention link listed in the "Related Links" section of this topic as a resource for learning more about implementation."

Media: Multimedia Overview; Universal Screening for All Students (6:16 min) and Expert Interview; Implementing a Screening Program

Donald Compton (5:59 min)

Handout: RTI Reading Practice Guide and How to Do It, Section 1: School-Wide Screening article http://www.nrcld.org/rti manual/pages/RTIManualSection1.pdf



# Action for District RtI Teams 1. Convene a meeting of building-level RtI leadership teams to assess the current level of implementation and quality of their screening programs. 2. Assist teams with planning an in-service for staff to review universal screening and reflect on their roles in and understanding of the process. 3. Provide resources that teams can use with their staff to support ongoing improvement of screening practices.

Screen all students for potential reading problems in the beginning and middle of the year.

## District Rtl Team or Administrator

Say: Now that schools in our district have introduced universal screening, what can we do to help them fully implement this practice?

## This idea for action includes:

- 1. Convene a meeting of building-level Rtl leadership teams to assess the current level of implementation and quality of their screening programs.
- 2. Assist teams with planning an in-service for staff to review universal screening and reflect on their roles in and understanding of the process.
- 3. Provide resources that teams can use with their staff to support ongoing improvement of screening





Say: The stages of implementation will vary across schools, depending on staff, resources, and the length of time universal screening has been in place.

Many teams, especially those who are new to screening, will need guidance on examining the status and quality of screening program components. U

se the Screening Implementation Self-Assessment to help teams reflect on current screening practices through three activities focused on assessing essential tasks and internal resources needed to fully implement universal screening and applying standards to judge program quality.

No Media

Handout #9: Screening Implementation Self-Assessment



## 2. Assist teams with planning an in-service for staff

- Give teams copies of the Practice Guide, Assisting Students Struggling With Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades pages 13-18.
- As a whole group, watch the video of a reading coach describing the components of a universal screening program.
- Lead teams in a discussion about key concepts and essential components to ensure understanding.

Say: Assist teams with planning an in-service for staff.

Give teams copies of the Practice Guide, *Assisting Students Struggling With Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades*, and ask them to review Recommendation 1 on universal screening (pp. 13-18). As a whole group, watch the <u>video of a reading coach</u> describing the components of a universal screening program. Lead teams in a discussion about key concepts and essential components to ensure understanding.



# 2. Assist teams with planning an in-service for staff • Guide individual teams in using the Learning Together About Universal Screening tool to plan an in-service. - tailored to staff needs - focused on refining existing screening implementation. • Make recommendations that they utilize the Practice Guide and reading coach video and, specific sections of the multimedia overview. • Work individually with each team to review draft plans and offer to follow up on-site.

Say: "Ask individual teams to use the Learning Together About Universal Screening to plan an in-service that is tailored to staff needs and focused on refining existing screening implementation.

Recommend that they distribute the Practice Guide screening recommendation to staff prior to the inservice and begin the in-service meeting with an in-depth review of screening practices at the school. Suggest that the reading coach video and, if needed, specific sections of the <u>multimedia overview</u> be included. Work individually with each team to review draft plans and offer to follow up on-site."



## 3. Provide Resources that Teams Can Use

- Provide copies of the Screening and Intervention Record Forms and School-wide Screening: Guidelines, Resources, Example.
- Demonstrate how they can use these materials with staff to ensure fidelity of screening implementation.
- Provide time for teams to discuss how they can best use these materials with individual staff members or in staff training.
- Provide opportunity to practice using the materials.

Say: "School staff will need ongoing support and resources to conduct an effective screening program. Pass out copies of the Screening and Intervention Record Forms and Schoolwide Screening: Guidelines, Resources, Example to the teams.

Demonstrate how they can use these materials with staff to ensure fidelity of screening implementation.

Provide time for teams to discuss how they can best use these materials with individual staff members or in staff training. In addition, ask teams to practice using the materials as they will need to be clear in explaining the purpose of the materials and providing directions for use when they return to their schools."

No Media

Handouts: Screening and Intervention Record Forms and Schoolwide Screening: Guidelines, Resources, Example



## Research Evidence

- Universal Screening incorporates research evidence from one Practice Guide recommendation:
- Guide recommendation:

   Screen all students for potential reading problems at the beginning of the year and again in the middle of the year (Recommendation 1).

  The recommendation is based on a series of high-quality correlational studies with replicated findings that show the ability of measures of reading proficiency administered in grades 1 and 2 to predict students' reading performance in subsequent years.

  The panel's research review addressed the issue of sensitivity and specificity of screening measures.

  Although the panel did not recommend which specific measures a school should adopt, it did not that students should be screened with measures similar to those in the reviewed studies.

- The Practice Guide provides a chart highlighting the focus, purpose, and limitations of commonly-used screening measures for grades K through 2.

## Research Evidence

Level of Evidence: Moderate

Universal Screening incorporates research evidence from one Practice Guide recommendation:

Screen all students for potential reading problems at the beginning of the year and again in the middle of the year (Recommendation 1).

This recommendation is based on a series of high-quality correlational studies with replicated findings that show the ability of measures of reading proficiency administered in grades 1 and 2 to predict studentsa' reading performance in subsequent years. Because the evidence base in kindergarten is weaker, especially for measures administered early in the school year, the panel recommended that kindergarten and first-grade students should also be given a second screening mid-year, when results tend to be more valid.

The panel's research review addressed the issue of sensitivity and specificity of screening measures. Evidence revealed problems with the specificity of commonly used measures. That is, the measures tend to consistently over-identify students as needing assistance even if they are at low risk of experiencing future reading problems. Also noted was a lack of cross-validation studies and representative samples. Even so, the panel concluded that the extensive body of replicated correlational research suggests that these are reasonable measures to use for early screening, particularly in first and second grade.

Although the panel did not recommend which specific measures a school should adopt, it did note that students should be screened with measures similar to those in the reviewed studies. The Practice Guide provides a chart highlighting the focus, purpose, and limitations of commonly-used screening measures for grades K through 2.



## Key Research

- Compton, D. L., Fuchs, D., Fuchs, L. S., & Bryant, J. D. (2006). Selecting at-risk readers in first grade for early intervention: A two-year longitudinal study of decision rules and procedures. *Journal of Educational Psychology*, 98(Z), 394-402.
- 98(Z), 394-409.

  Fuchs, L. S., Fuchs, D., & Compton, D. L. (2004). Monitoring early reading development in first grade: Word identification fluency versus nonsense word fluency. Exceptional Children, 71(1), 7-21.

  McCardle, P., Scarborough, H. S., & Catts, H. W. (2001). Predicting, explaining, and preventing children's reading difficulties. Learning Disabilities: Research & Practice, 16(4), 230-239.
- O'Connor, R. E., & Jenkins, J. R. (1999). The prediction of reading disabilities in kindergarten and first grade. *Scientific Studies of Reading,*
- 3(2), 159-197.
  Speece, D., Mills, C., Ritchey, K., & Hillman, E. (2003). Initial evidence that letter fluency tasks are valid indicators of early reading skill. *Journal of Special Education*, 36(4), 223-233.

## **Key Research**

Compton, D. L., Fuchs, D., Fuchs, L. S., & Bryant, J. D. (2006). Selecting at-risk readers in first grade for early intervention: A two-year longitudinal study of decision rules and procedures. Journal of Educational Psychology, 98(2), 394-409. Rtl models for identifying learning disabilities rely on the accurate identification of children who, without Tier 2 intervention, would develop reading disability (RD). This study addresses the impact of including word identification fluency measures and progress monitoring in first-grade assessments on the accuracy of predicting RD. Additionally, researchers investigated whether classification tree analysis offered improved prediction over logistic regression. Results showed that prediction improved sufficiently with the use of word identification fluency and classification tree analysis improved prediction sufficiently to recommend its use with Rtl.

Fuchs, L. S., Fuchs, D., & Compton, D. L. (2004). Monitoring early reading development in first grade: Word identification fluency versus nonsense word fluency. Exceptional Children, 71(1), 7-21. This study assessed 151 atrisk first-grade students to contrast the validity of two curriculum-based early-reading measures: word identification fluency and nonsense word fluency. Students were assessed on criterion reading measures in the fall and spring of first grade and on the two fluency measures each week for seven weeks and twice weekly for an additional 13 weeks. Results demonstrated the superiority of word identification fluency over nonsense word fluency. Findings are discussed in terms of the measures' utility for identifying children in need of intensive instruction and for monitoring children's progress through first grade.

McCardle, P., Scarborough, H. S., & Catts, H. W. (2001). Predicting, explaining, and preventing children's reading difficulties. Learning Disabilities: Research & Practice, 16(4), 230-239. Several decades of research have made it clear that by the time children enter school they already vary widely in their reading-related knowledge and skills. This paper summarizes what is already known about how these differences predict differences in reading acquisition, what they tell us about the causes of reading disabilities, and how research findings can be used to reduce the number of children with reading difficulties. Findings indicate that kindergarteners' letter knowledge and print concepts are good predictors in early childhood of future reading ability. Four types of models are presented to explain why some children are less successful than others in learning to read. The authors also discuss what directions need to be taken in future research to provide fuller answers.

O'Connor, R. E., & Jenkins, J. R. (1999). The prediction of reading disabilities in kindergarten and first grade. Scientific Studies of Reading, 3(2), 159-197. The goal of this study was to design a small set of phonological, letter, and memory tasks that would reliably identify kindergarten and first-grade students at risk for reading difficulties. Discriminant analysis using a small set of predictors showed success in identifying children who exhibited reading difficulties at the end of first grade. Measures taken early in first grade were more accurate discriminators than those taken late in kindergarten, which were more discriminating than measures early in kindergarten. While segment phonemes and rapid letter naming qualified as primary discriminators of difficulties at all three screening windows, other tasks were discriminators at some but not all screening windows.

Speece, D., Mills, C., Ritchey, K., & Hillman, E. (2003). Initial evidence that letter fluency tasks are valid indicators of early reading skill. Journal of Special Education, 36(4), 223-233. This longitudinal investigation evaluated the validity of letter-name fluency and nonsense word fluency measures as indicators of early reading skill in a sample of 39 kindergarten students. In the spring of kindergarten and first grade, students completed language, reading-related, and reading measures. Evidence supported the validity of both measures, with nonsense word fluency receiving the strongest support. When reading was defined by oral reading fluency, both fluency measures were more sensitive than any other measure in identifying poor reader status in first grade. These findings extend the usefulness of nonsense word fluency to the early identification of at-risk kindergarten students.